

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (Currently Amended): A method for making an isomalto-oligosaccharide grain composition said method comprising:

- (a) contacting an ungelatinized starch in grain (insoluble starch) with [[a]] an exogenous maltogenic enzyme and a starch liquefying enzyme to produce maltose;
- (b) contacting said maltose with a transglucosidic enzyme, wherein said steps (a) and (b) occur at a temperature less than or at the gelatinization temperature of said starch; and
- (c) obtaining a grain composition having an enzymatically produced isomalto-oligosaccharide, wherein said oligosaccharide is obtained from said grain.

Claim 2 (Original): The method according to claim 1, wherein said steps (a) and (b) occur concurrently.

Claim 3 (Previously Presented): The method according to claim 1, further comprising the step of drying said isomalto-oligosaccharide with or without separating insoluble solids.

Claim 4 (Original): The method according to claim 1, wherein said grain is selected from the group consisting of wheat, rye, barley, and malt.

Claim 5 (Original): The method according to claim 1, wherein said grain is selected from the group consisting of millet, sorghum and rice.

Claim 6 (Original): The method according to claim 1, wherein said maltogenic

enzyme is a beta amylase.

Claim 7 (Original): The method according to claim 1, wherein said maltogenic enzyme is endogenous to said grain.

Claim 8 (Previously Presented): The method according to claim 1, wherein said starch liquefying enzyme is an alpha amylase obtained from a *Bacillus* species.

Claim 9 (Previously Presented): The method according to claim 8, wherein said *Bacillus* species is *Bacillus licheniformis* or *Bacillus stearothermophilus*.

Claim 10 (Original): The method according to claim 1, wherein said transglucosidic enzyme is a transglucosidase.

Claim 11 (Previously Presented): The method according to claim 10, wherein said transglucosidase is obtained from an *Aspergillus* species.

Claim 12 (Previously Presented): The method according to claim 11, wherein said *Aspergillus* species is *Aspergillus niger*.

Claims 13-17(Cancelled)

Claim 18 (Currently Amended): The [[A]] method according to claim 1, wherein said isomalto-oligosaccharide is further purified.

Claim 19 (Previously Presented): The method of claim 1, wherein said isomalto-oligosaccharide is used as a food additive.

Claim 20 (Previously Presented): The method of claim 1, wherein said isomalto-

oligosaccharide is used in a flour composition.

Claim 21 (Previously Presented): The method of claim 1, wherein said isomaltoligosaccharide is used in an oral rehydration solution.

Claim 22 (Cancelled)

Claim 23 (Previously Presented): The method of claim 1, wherein said temperature less than or at the starch gelatinization temperature is below 50°C to 70°C.

Claim 24 (Previously Presented): The method of claim 1, wherein said temperature less than or at the starch gelatinization temperature is below 55°C to 65°C.

Claim 25 (Previously Presented): The method of claim 1, wherein said temperature less than or at the starch gelatinization temperature is below 60°C.

Claim 26 (Previously Presented): The method of claim 6, wherein said beta amylase is obtained from a fungal, bacterial, or plant source.

Claim 27 (Previously Presented): The method of claim 6, wherein said beta amylase is obtained from a *Bacillus* species.

Claim 28 (Previously Presented): The method of claim 27, wherein said *Bacillus* species is selected from *Bacillus stearothermophilus*, *Bacillus amyloliquefaciens*, and *Bacillus licheniformis*.

Claim 29 (Previously Presented): The method of claim 6, wherein said beta amylase is obtained from a plant source selected from soybean, wheat, and barley.

Claim 30 (Previously Presented): The method of claim 1, wherein step (a) further comprises contacting said ungelatinized starch with a debranching enzyme.

Claim 31 (Previously Presented): The method of claim 30, wherein said debranching enzyme is a pullulanase enzyme.